djosurgical®

AltiVate®
Extremity Solutions®

Reaching Higher by Design

AltiVate® Anatomic

AltiVate Reverse®

Discovery® Elbow

AltiVate® Match Point System®

Alians Proximal Humerus

DJO®

Reaching higher by design...

SO PATIENTS CAN, TOO.[4]

At DJO Surgical®, our end goal is to help patients reach their greatest potential. We strive to achieve this through innovation, proven results, and clinical heritage. Our approach is to partner with surgeon experts in the field to design systems that ultimately provide extremity solutions. DJO Surgical's AltiVate Extremity Solutions® are anatomic designs engineered to provide optimized function, enhanced fixation, and flexibility and versatility to manage differing patient needs. Our aim is to reach new elevations by providing clinicians solutions to help their patients reach higher.[4]

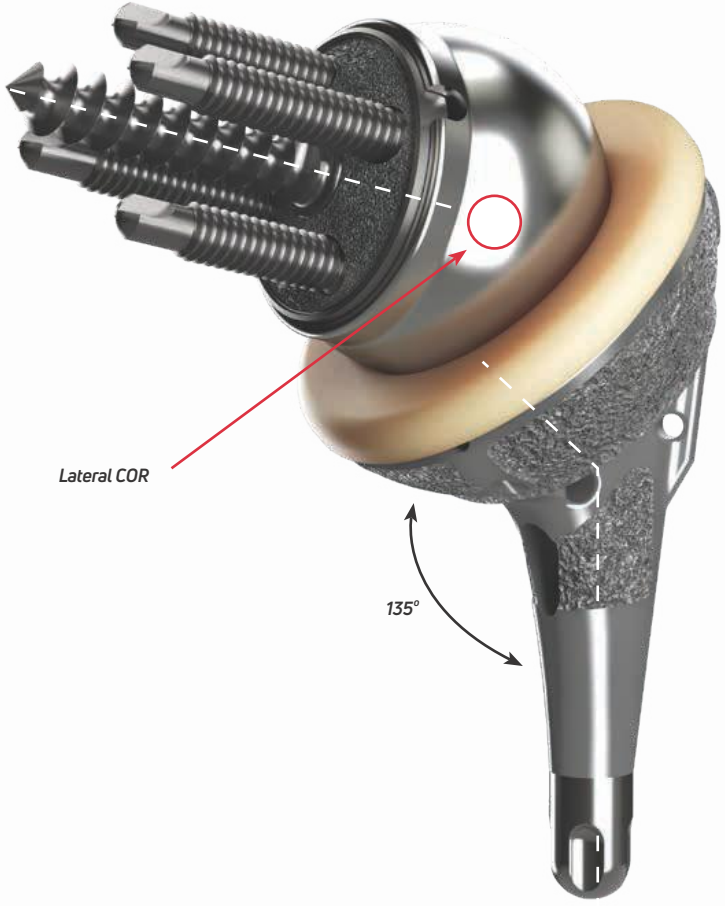
djosurgical®

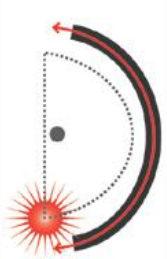
AltiVate Reverse® Shoulder

The anatomically-based, data-driven AltiVate Reverse® system incorporates enhanced fixation technologies and precision instrumentation for exceptional fit in more of your patients.[5] With indications for reverse shoulder arthroplasty, anatomic shoulder arthroplasty, and hemiarthroplasty (including proximal humerus fractures), AltiVate Reverse is one platform to treat your arthroplasty patients. This system offers the first short, inlay, convertible humeral stem in the United States.

Anatomic Design with Optimized Function

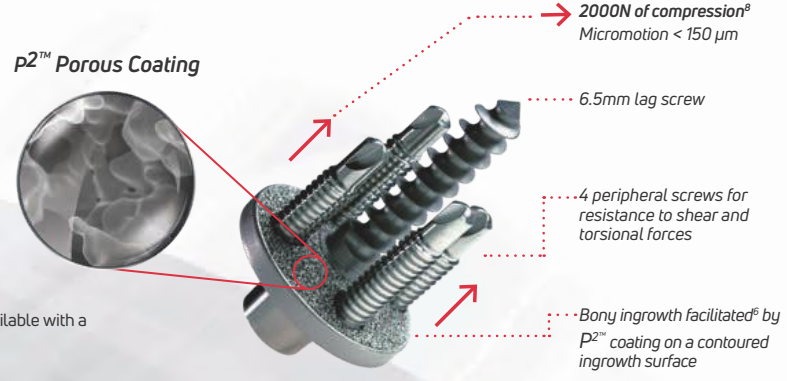
Elevating the 10-year clinical success[4] of the RSP®, the first reverse shoulder design to successfully incorporate a center of rotation (COR) lateral to the glenoid, DJO Surgical® introduces its latest Reverse Shoulder Solution. The AltiVate Reverse system incorporates an optimized stem design based on anatomic studies with CT scans for determination of shell-to-stem position as well as the ability to best match patient anatomy for anatomic total and reverse total shoulder constructs.[5] An anatomic 135° humeral neck-shaft angle has shown through biomechanical testing to help reduce the potential for inferior scapular notching.[1] The system remains based on a lateralized center of rotation, and the premier offering is a glenosphere with the center of rotation closest to the anatomic center.



Lateral COR	Medial COR
Larger Range of Motion	Smaller Range of Motion
	
A lateral COR maximizes range of motion while reducing the potential for inferior scapular notching.[1]	A medial COR reduces range of motion and creates the potential for inferior scapular notching.[1] Inferior scapular notching has been associated with poor clinical outcomes.[2]

Enhanced Fixation Design and Technologies

On both the glenoid and humeral side, expect improved short and long term fixation as a result of stable initial fixation as well as ideal conditions for bony ingrowth.[6]

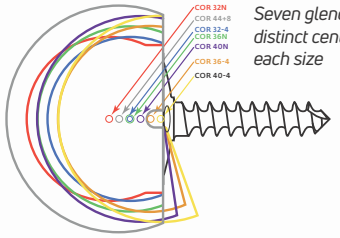


**The baseplate is also available with a 3DMatrix® and HA coating

Flexibility and Versatility

Implants

A wide variety of intra-operative options help to manage complex anatomies and to achieve the best surgical outcomes. Indications include anatomic total, anatomic hemi, reverse total, hemi for fracture and reverse for fracture.



Seven glenospheres with a distinct center of rotation in each size

Standard and +4mm socket inserts are available in both conventional polyethylene and e+™ polyethylene. An 8mm spacer is also an option and an additional 12mm metal spacer is also available with the Small Shell stem. Hemi-adapters allow the AltiVate Reverse® stems to be used in anatomic and hemiarthroplasty.

Stems available in four lengths (48mm, 108mm, 175mm and 220mm) and diameters of 6mm-18mm for Standard Shell and 6-12mm for Small Shell.

Instruments

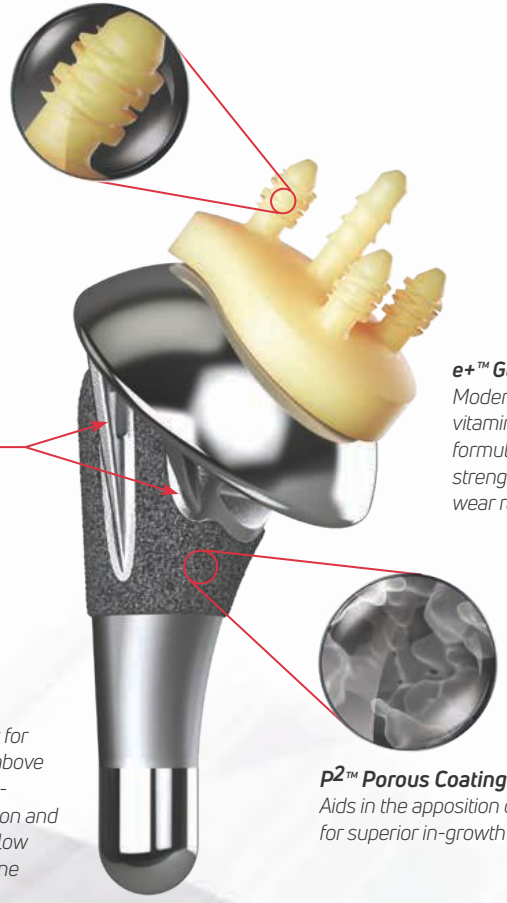
Precision instrumentation caters to differing surgeon preferences and results in a streamlined technique. A metaphyseal-referenced approach dictates stem position based on the fit in the metaphysis while a diaphyseal-referenced approach bases the stem position on the fit in the canal. Specialized instrumentation allows for stem removal with minimal bony disruption in a revision scenario.

AltiVate® Anatomic Shoulder

Reaching Higher by Design

The data-driven[9] design of the AltiVate® Anatomic Shoulder System features a short P2™ coated humeral stem providing excellent initial and long-term bony ingrowth[6] and a glenoid component with patent pending Drop-and-Go® technology for immediate fixation. The result is a truly anatomic reconstruction with fixation you can feel.

Drop-and-Go® Technology
Patent pending trilobe design provides enhanced fixation on the peripheral pegs.[9]



Proximal Fins
Designed to impart initial stability, facilitate stem alignment and include suture hole options for enhanced soft tissue fixation.

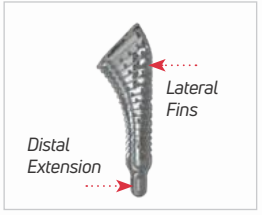
e+™ Glenoid
Moderately crosslinked vitamin E polyethylene formulated to maintain strength and reduce wear rates.[7]

Surface Finish
Optimized layout for bone in-growth above the metaphyseal-diaphyseal junction and smooth finish below to discourage bone on-growth.

P2™ Porous Coating
Aids in the apposition of bone for superior in-growth results.[6]

Instrumentation

The AltiVate® Anatomic instrumentation is designed to facilitate accurate implant placement and increase visibility of the surgical site.



The lateral fins and distal extension of the humeral broach assist stem implant alignment

Cannulated instruments provide increased alignment during drilling and reaming of the glenoid

Innovative low profile designs and translucent materials increase function and visibility

Data-Driven Design

A comprehensive 3 dimensional CT database of humeral and glenoid specimens was used to optimize implant design resulting in a truly anatomic reconstruction.

Putting It All Together

DJO® shoulder systems are designed to provide a complete and seamless shoulder solutions platform. Conversion Modules minimize the potential challenges of removing a well-fixed humeral stem by allowing conversion of a primary total shoulder to a reverse shoulder and a reverse shoulder to a hemi arthroplasty prosthesis.

Turon®
Keeled Glenoid***

Turon
Pegged Glenoid***

AltiVate® Anatomic
Pegged Glenoid

AltiVate Anatomic Neutral Humeral Heads*
AltiVate Anatomic Offset Humeral Heads*

Turon Neutral Humeral Heads
Turon Offset Humeral Heads

* The AltiVate Anatomic 56 X 22 Humeral Heads are not cleared for use with the Turon Humeral Stems

** The AltiVate Anatomic Humeral Heads are not cleared for use with the Turon Humeral Neck, 7.5 Degree

***Refer to the Turon Shoulder System Surgical Technique for humeral head and Turon Glenoid radius of curvature mismatch

Turon Humeral
Neck Neutral**

Turon Humeral
Stems

Turon Conversion Shell

RSP® Monoblock
Hemi-Adapter

RSP Monoblock Humeral Stems
AltiVate Reverse® Humeral Stems

AltiVate Anatomic
Humeral Neck, Neutral

AltiVate Anatomic
Short Humeral Stems

AltiVate Anatomic
Conversion Shell

AltiVate® Match Point System®

Enabling surgeons to preoperatively and intraoperatively tailor shoulder arthroplasty to the patient's unique anatomy, Match Point System®, in conjunction with the AltiVate Reverse®, AltiVate® Anatomic, or Turon® Anatomic shoulder system, allows surgeons to Aim at enhancing patient outcomes and Set patients' goals to Reach Higher by ensuring the surgical plan is Matched to the patient's specific anatomy.

Aim

- at enhancing patient outcomes

- CT based 3D model
- Visualize unique anatomy
- Prepares surgeons preoperatively

Set

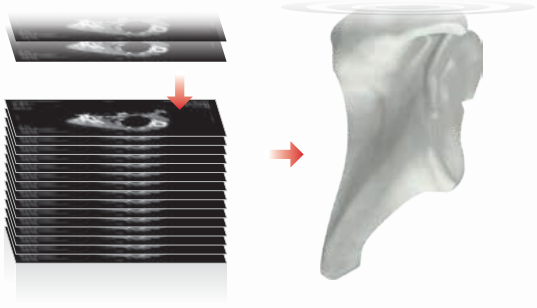
- patient goals to reach higher

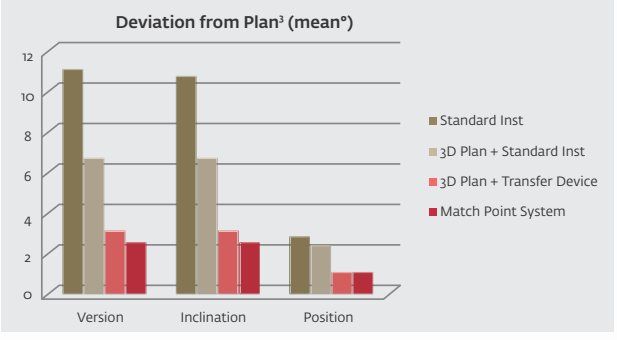
- Virtually planned surgery
- Optimized implant position
- Based on entirety of anatomy not visible in surgery

Matched

- to the patient's specific anatomy

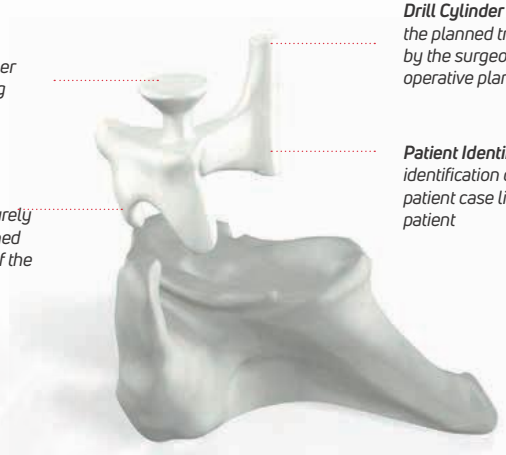
- Guide and model delivered to surgery
- Accurately reproduces plan intra operatively[3]
- Reduces variability of conventional methods





Push Handle *- gentle pressure applied to the push handle further stabilizes the guide while drilling the pilot hole*

Coracoid Clip *- unique coracoid clip securely attaches to the patient's coracoid, designed to provide a stable and reproducible fit of the guide to the patient's anatomy*



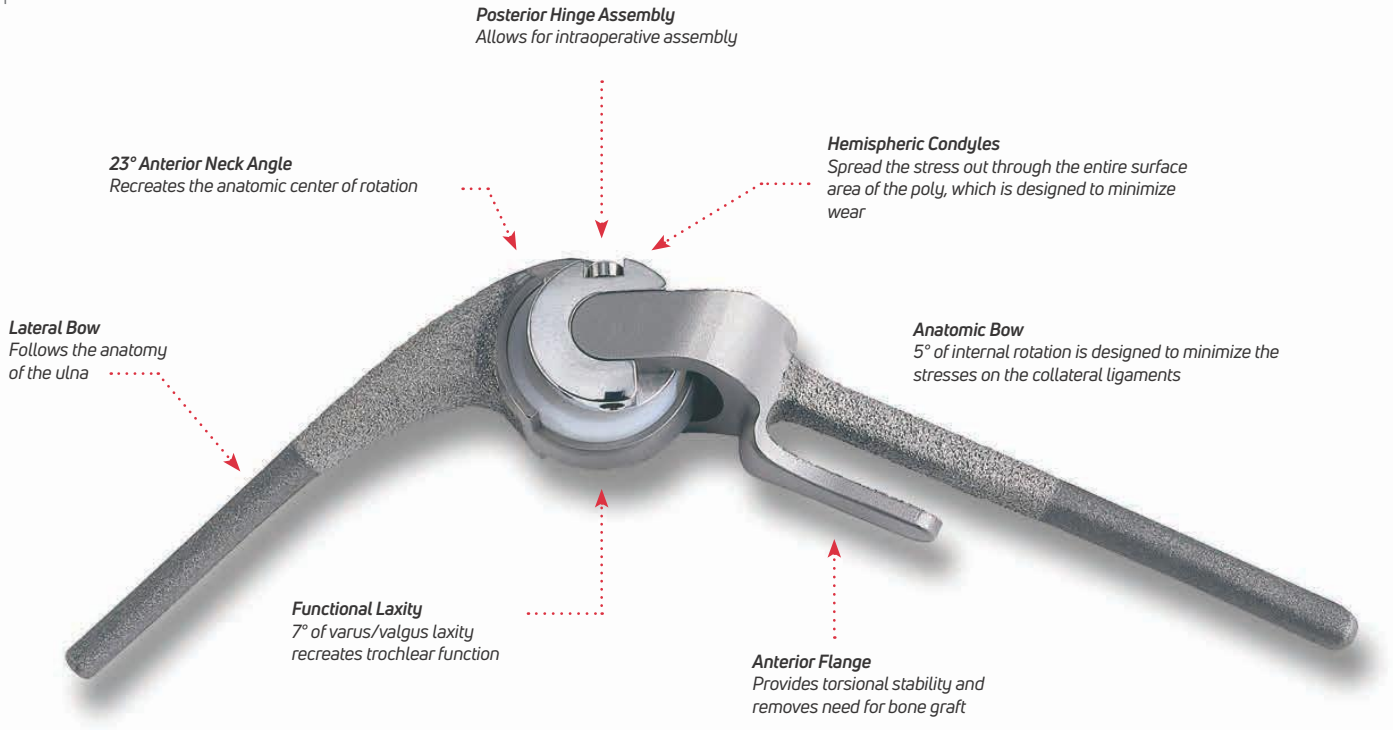
Drill Cylinder *- designed to replicate the planned trajectory determined by the surgeon through the pre-operative planning process*

Patient Identifier *– unique identification code specific for each patient case links the guide to the patient*

AltiVate® Discovery® Elbow System

Anatomic Design

The Discovery® Elbow System is designed to reproduce the anatomy and restore the mechanics of the elbow. With its user-friendly instrumentation and intra-operative assembly options, this implant is suitable for surgeons of all experience levels.



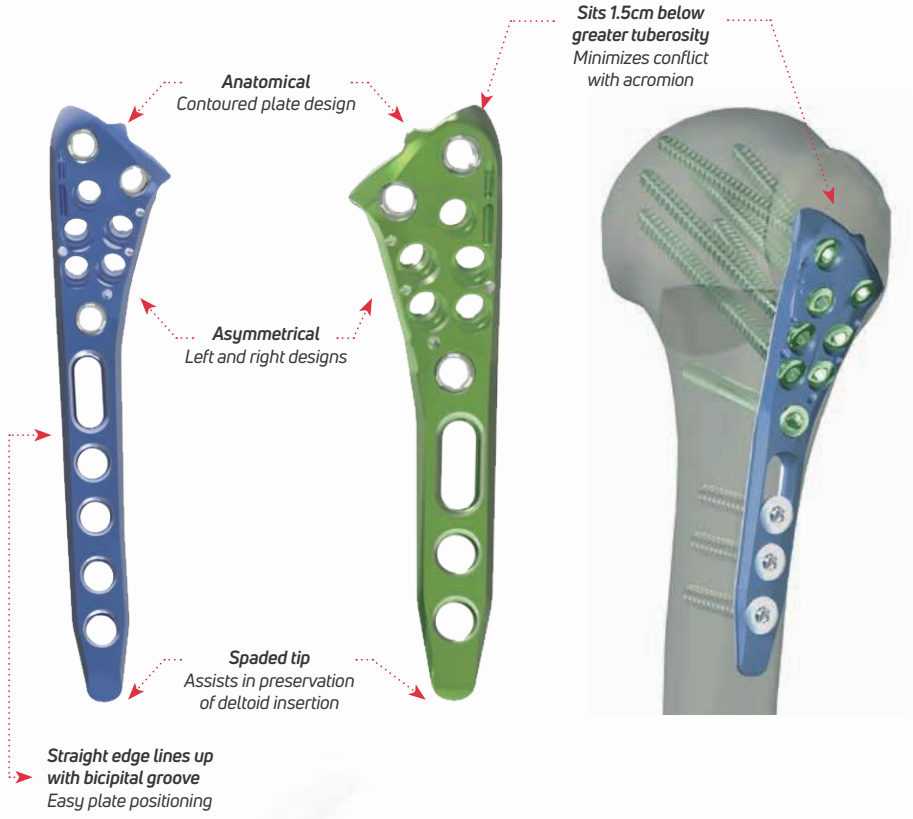
Flexibility and Versatility

Any size ulnar component can be paired with any size humeral component. The size 3.5 humeral component, however, can only be paired with the size 2.5 ulnar component.

Alians Proximal Humerus

The Alians Proximal Humerus provides another fracture management option to the AltiVate Extremity Solutions® Portfolio. This fracture plate system features an anatomically contoured design with patented polyaxial locking screw options and is paired with simple, streamlined instrumentation.

Anatomic Design

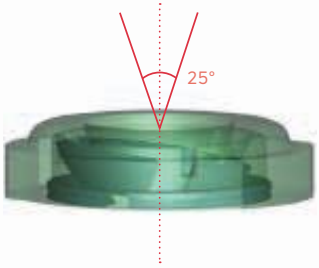


Optimized proximal screw hole placement

Divergent fixed angled screws placed in inferior half of humeral head

- Targets location of most robust bone
- Blunt-tipped screws limit protrusion through articular surface

Flexibility and Versatility



Patented Dualtec™ System I® polyaxial locking fixation

- Variable angle technology for 25° (±12.5°)
- Allows for repeated insertion and re-angulations of screw without sacrificing its strength

Five unique suture holes for soft tissue fixation

- Accessible even after plate attachment, so pre-loading sutures is not required

Simple and streamlined instrumentation

- 1 tray, 1 screw size, 1 drill bit, 1 driver

Manufactured by

NEWCLIP TECHNICS

Proven Results

The Turon® shoulder is benchmarked off of the design and principles of the Charles Neer shoulder prosthesis; and RSP® is one of the most well-published reverse shoulders on the market with over fifty peer reviewed journal publications. As of November 2017, the RSP is the first reverse shoulder implant to have sustained excellent patient outcomes at minimum 10-year follow up.[4]

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Proven Results - continued

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Extremity Solutions

Reaching Higher by Design

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MKT0030201-001 Rev G

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